

Title (en)

MEMBRANE FILTRATION DEVICE AND METHOD FOR CLEANING MEMBRANE FILTRATION DEVICE

Title (de)

MEMBRANFILTRATIONSVORRICHTUNG UND VERFAHREN ZUR REINIGUNG EINER MEMBRANFILTRATIONSVORRICHTUNG

Title (fr)

DISPOSITIF DE FILTRATION À MEMBRANE ET PROCÉDÉ DE NETTOYAGE DE DISPOSITIF DE FILTRATION À MEMBRANE

Publication

EP 3892363 A1 20211013 (EN)

Application

EP 19904518 A 20191212

Priority

- JP 2018243845 A 20181227
- JP 2019048609 W 20191212

Abstract (en)

A plurality of membrane separation units 11 are disposed vertically in multiple levels. In each of the membrane separation units 11: the primary side, to which raw water is supplied, is connected to a backwash drainage system 12 and a flushing air supply system 13; and the secondary side, from which a permeate is removed, communicates with a backwash water supply system 15. The backwash water supply system 15 has: a backwash water main pipe 151 channeling backwash water; and a plurality of backwash water branch pipes 152 connected in parallel to the backwash water main pipe 151, the backwash water branch pipes 152 feeding backwash water towards the respective membrane separation unit 11 in each of the levels. The backwash drainage system 12 has: a plurality of backwash drainage branch pipes 122 into which backwash drain water flows from the respective membrane separation unit 11 in each of the levels; and a backwash drainage main pipe 121 to which the respective backwash drainage branch pipe 122 in each of the levels is connected, the backwash drainage main pipe 121 channeling backwash water from above to below. The flushing air supply system 13 has: an air main pipe 131 channeling flushing air from below to above; and a plurality of air branch pipes 132 connected in parallel to the air main pipe 131, the air branch pipes 132 feeding the flushing air towards the respective membrane separation unit 11 in each of the levels.

IPC 8 full level

B01D 65/02 (2006.01); **C02F 1/44** (2006.01)

CPC (source: EP US)

B01D 63/00 (2013.01 - US); **B01D 65/02** (2013.01 - EP US); **C02F 1/44** (2013.01 - EP US); **B01D 2317/04** (2013.01 - EP US); **B01D 2321/04** (2013.01 - EP US); **B01D 2321/12** (2013.01 - US); **B01D 2321/18** (2013.01 - US); **B01D 2321/185** (2013.01 - EP); **B01D 2321/2083** (2013.01 - EP); **C02F 2303/16** (2013.01 - EP US)

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DOCDB simple family (publication)

EP 3892363 A1 20211013; **EP 3892363 A4 20220810**; CN 113226523 A 20210806; JP 2020104041 A 20200709; JP 6509421 B1 20190508; US 2022111336 A1 20220414; WO 2020137564 A1 20200702

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